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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,369	04/15/2004	Masashi Kitabayashi	119444	6614

25944 7590 03/25/2005

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EXAMINER
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MAHONEY, CHRISTOPHER E

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/824,369

Applicant(s)

KITABAYASHI, MASASHI

Examiner

Christopher E. Mahoney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8 and 11-13 is/are rejected.
- 7) ☒ Claim(s) 7, 9, 10 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date Aug 24, 2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

Claim 4 is objected to because of the following informalities: There is a lack of antecedent basis for the recited light-irradiation side in claim 4. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by either a 1982 Toyota Corolla or a 1996 Volkswagen Jetta. Both automobiles were on sale more than 1 year prior to the filing date of the present application. The examiner has personally owned both of these vehicles. Both vehicles has a cooling device (fan) that blows a cooling air to a heated object (radiator coolant lines) comprising a fan body having a vane supported by a rotary shaft of a rotary drive source (fan motor and/or belt) and a chassis that houses the fan body (fan chassis attached to the radiator and/or the automobile chassis) the chassis being made of a heat

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conductive metal (aluminum or steel) and having a heat radiator (fins) that radiates heat generated on the object to an outside by heat conduction.

Claims 1-3, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Haba (U.S. Patent No. 6,568,813). Haba teaches a projector comprising an optical light modulator 925, a projection optical system 6, and a cooling device 17 that blows a cooling air to a heated object 910 comprising a fan body having a vane supported by a rotary shaft of a rotary drive source (figure 2) and a chassis 64 that houses the fan body the chassis being made of a heat conductive metal and having a heat radiator 303 that radiates heat generated on the object to an outside by heat conduction. The applicant is directed to review figures 2, 9, 12 and 13.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haba (U.S. Patent No. 6,568,813). Haba teaches the salient features of the claimed invention except for using metal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use metal, a known thermal conductor, for the purpose of utilizing readily available inexpensive materials. The applicant should note that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

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Claims 1-6, 8, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takizawa (U.S. Patent No. 6,139,155) in view of Nishihara (U.S. Patent No. 6,834,964).

Takizawa teaches an optical device comprising a plurality of optical modulators 925 a projection optical system 6, and a cooling device 17c that blows a cooling air to a heated object 910 comprising a fan body having a vane supported by a rotary shaft of a rotary drive source (figure 8) and a chassis 903 that houses the fan body the chassis being made of a heat conductive metal (magnesium). Takizawa does not teach the heat radiator or conductive plates. Nishihara teaches in figure 1 that it was known to provide an optical light modulator cooling system with a heat radiator 8 and a conductive plate 3. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Nishihara for the purpose of additional cooling.

#### *Allowable Subject Matter*

Claims 7, 9-10 and 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

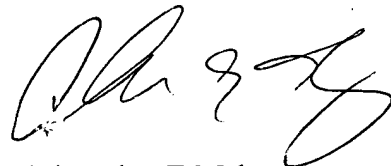
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Mahoney whose telephone number is (571) 272-2122. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Chris Mahoney', with a stylized flourish at the end.

Christopher E Mahoney  
Primary Examiner  
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